

CLAIMS

1. A method, comprising:

receiving an alert for a user from one of multiple alert sources;

mapping the alert to a delivery mode; and

transmitting the alert to the user according to the specified delivery mode.

2. The method as recited in claim 1, wherein mapping the alert further comprises mapping the alert according to the source of the alert.

3. The method as recited in claim 1, wherein mapping the alert further comprises mapping the alert according to alert content.

4. The method as recited in claim 1, wherein the delivery mode specifies a delivery method used to deliver the alert and wherein the transmitting further comprises transmitting the alert to the user via the delivery method indicated in the delivery mode.

5. The method as recited in claim 1, wherein the delivery mode specifies a delivery action that indicates a delivery method to be used to deliver the alert and whether an acknowledgement to the alert should be expected, and the method further comprises waiting for an acknowledgement to the alert if the delivery mode indicates that an acknowledgement to the alert should be expected.

1 6. The method as recited in claim 5, wherein the delivery action
2 specifies a time period to wait for an acknowledgement if an acknowledgement to
3 the alert is expected, and wherein the waiting further comprises waiting the
4 specified time period for an acknowledgement to the alert.

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6 7. The method as recited in claim 1, wherein:
7 the delivery mode further specifies a first delivery method used to deliver
8 the alert;

9 the delivery mode further specifies a second delivery method used to
10 deliver the alert; and

11 the transmitting further comprises transmitting the alert to the user via the
12 first delivery method and the second delivery method as indicated by the delivery
13 mode.

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15 8. The method as recited in claim 1, wherein the mapping further
16 comprises:

17 defining one or more categories of alerts;

18 assigning a delivery mode to each category; and

19 categorizing the alert, thereby mapping the alert to the delivery mode
20 of the category.

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22 9. The method as recited in claim 8, further comprising assigning a
23 priority to each category, and wherein the assigning a delivery mode further
24 comprises assigning a delivery mode to a category based on the priority assigned
25 to the category.

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10. The method as recited in claim 1, wherein:
the delivery mode further comprises a primary delivery block specifying at least one delivery action, and a secondary delivery block specifying at least one delivery action;
the mapping the alert to a delivery mode further comprises mapping the alert to the delivery action specified in the primary delivery block and mapping the alert to the delivery action specified in the secondary delivery block; and
transmitting the alert to the user according to the delivery action specified in the secondary delivery block if transmitting the alert to the user according to the delivery action specified in the primary delivery block is unsuccessful.

1 11. The method as recited in claim 10, wherein the delivery actions
2 specified in the primary delivery block and the secondary delivery block indicate a
3 delivery method to be used to deliver the alert and whether an acknowledgement
4 to the alert should be expected, and the method further comprises:

5 waiting for an acknowledgement to the transmission of the alert according
6 to the delivery action of the primary delivery block if the delivery action of the
7 primary delivery block indicates that an acknowledgement to the alert should be
8 expected; and

9 waiting for an acknowledgement to the transmission of the alert according
10 to the delivery action of the secondary delivery block if the delivery action of the
11 secondary delivery block indicates that an acknowledgement to the alert should be
12 expected, provided the alert is transmitted according to the secondary delivery
13 block.

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15 12. The method as recited in claim 10, wherein:

16 the primary delivery block specifies a first delivery action that indicates a
17 first delivery method and a second delivery action that indicates a second delivery
18 method;

19 the transmitting the alert to the user according to the delivery action
20 specified in the secondary delivery block further comprises transmitting the alert
21 to the user according to the delivery action specified in the secondary delivery
22 block if either the first delivery method indicated in the first delivery action of the
23 primary delivery block, or the second delivery method indicated in the second
24 delivery action of the primary delivery block fails to result in transmission of the
25 alert to the user.

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2 13. The method as recited in claim 10, wherein:

3 each delivery action further comprises:

4 a delivery method to be used to deliver the alert;

5 whether an acknowledgement to the alert should be expected;

6 a time period to wait for an acknowledgement if an

7 acknowledgement to the alert is expected; and

8 the method further comprises:

9 waiting for an acknowledgement to the transmission of the
10 alert according to the delivery action of the primary delivery block if
11 the delivery action indicates that an acknowledgement to the alert is
12 expected; and

13 waiting for an acknowledgement to the transmission of the
14 alert according to the delivery action of the secondary delivery block
15 if the delivery action indicates that an acknowledgement to the alert
16 is expected, provided that the alert was transmitted according to the
17 secondary delivery block.

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2 14. The method as recited in claim 10, wherein the primary delivery
3 block and the secondary delivery block each specify a first delivery action that
4 indicates a first delivery method to be used to deliver the alert and whether an
5 acknowledgement to the alert should be expected, and a second delivery action
6 that indicates a second delivery method to be used to deliver the alert and whether
7 an acknowledgement to the alert should be expected, the method further
8 comprising:

9 waiting for an acknowledgement to the transmission of the alert according
10 to each delivery action of the primary delivery block that indicates that an
11 acknowledgement to the alert should be expected; and

12 waiting for an acknowledgement to the transmission of the alert according
13 to each delivery action of the secondary delivery block that indicates that an
14 acknowledgement to the alert should be expected, provided the alert is transmitted
15 according to the delivery actions of the secondary delivery block.
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17 15. The method as recited in claim 14, wherein each delivery action that
18 indicates to wait for an acknowledgement specifies a time period to wait for an
19 acknowledgement, and wherein waiting for an acknowledgement further
20 comprises waiting the specified time period for an acknowledgement.
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2 16. A centralized alert delivery system, comprising:
3 an input/output (I/O) module configured to receive alerts from multiple
4 alert sources;
5 a mapping module configured to map an alert to a delivery mode; and
6 a communications layer that interfaces to one or more communications
7 modules, the communications layer being configured to receive the mapped alert
8 and deliver the alert via a communications module according to the delivery mode
9 associated with the alert.

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11 17. The centralized alert delivery system as recited in claim 16, wherein
12 the mapping module is further configured to map the alert according to the source
13 of the alert.

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15 18. The centralized alert delivery system as recited in claim 16, wherein
16 the alert further comprises content, and wherein the mapping module is further
17 configured to map the alert according to the content of the alert.

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19 19. The centralized alert delivery system as recited in claim 16, wherein
20 the delivery mode specifies a delivery action that indicates a delivery method by
21 which an alert associated with the delivery mode is transmitted.

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23 20. The centralized alert delivery system as recited in claim 19, wherein
24 the delivery method is chosen from one of the following delivery methods: e-mail,
25 instant messaging, SMS (short message service) messaging.

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2 21. The centralized alert delivery system as recited in claim 16, wherein
3 the delivery mode further comprises one or more delivery blocks, each delivery
4 block including one or more delivery actions, each delivery action specifying:
5 a delivery method by which an alert associated with the delivery mode is
6 transmitted;
7 whether an acknowledgement to the alert is expected; and
8 if an acknowledgement to the alert is expected, a time to wait for the
9 acknowledgement.

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11 22. The centralized alert delivery system as recited in claim 16, wherein
12 the delivery mode further comprises one or more delivery blocks, each delivery
13 block including one or more delivery actions, each delivery action specifying a
14 delivery method by which the associated alert is transmitted and whether an
15 acknowledgement to the transmitted alert is expected.

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17 23. The centralized alert delivery system as recited in claim 22, wherein
18 each delivery action that indicates an acknowledgement is expected further
19 specifies a time to wait for the acknowledgement.
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24. The centralized alert delivery system as recited in claim 16, wherein:
the delivery mode further comprises a primary delivery block and a
secondary delivery block; and
the communications layer is further configured to deliver the alert via the
one or more communications modules according to a delivery method specified in
the primary delivery block and, if delivery according to the primary delivery block
fails, to deliver the alert according to a delivery method specified in the secondary
delivery block.

25. The centralized alert delivery system as recited in claim 16, wherein:
the delivery mode further comprises a primary delivery block that includes
a first delivery action that specifies a delivery method and a second delivery action
that specifies a delivery method; and
the communications layer is further configured to deliver the alert via the
one or more communications modules according to the delivery method specified
in the first delivery action and according to the delivery method specified in the
second delivery action.

26. The centralized alert delivery system as recited in claim 25, wherein:
the delivery mode further comprises a secondary delivery block; and
the communications layer is further configured to delivery the alert via the
one or more communications modules according to a delivery method specified in
the secondary delivery block if the delivery of the alert according to either the first
delivery action or the second delivery action in the primary delivery block fails.

1 27. The centralized alert delivery system as recited in claim 16, further
2 comprising a categories module that identifies categories into an alert may be
3 categorized, wherein each category has an associated delivery mode; and
4 the mapping module is further configured to categorize the alert into a
5 category identified in the categories module thereby associating the alert with the
6 delivery mode of the category.

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8 28. A computer system, comprising:
9 a processor;
10 an I/O module;
11 memory; and
12 an alert center stored in the memory, the alert center including:
13 a subscription layer configured to receive an alert from an alert source and
14 assign a delivery mode to the alert; and
15 a communications layer configured to transmit the alert according to a
16 delivery mode assigned to the alert.

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18 29. The computer system as recited in claim 28, wherein the alert center
19 is further configured to monitor for an acknowledgement that the alert was
20 successfully delivered.
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1 30. The computer system as recited in claim 28, wherein the alert center
2 is further configured to monitor for an acknowledgement that the alert was
3 successfully delivered and, if an acknowledgment is not received within a
4 specified time period, assign a backup delivery method to the alert and attempt to
5 deliver the alert according to the backup delivery method.

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7 31. The computer system as recited in claim 28, wherein:
8 the delivery mode further comprises a primary delivery block having a first
9 delivery action and a second delivery action; and
10 the communications layer is further configured to transmit the alert
11 according to the first delivery action and the second delivery action of the primary
12 delivery block.

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14 32. The computer system as recited in claim 31, wherein:
15 the delivery mode further comprises a primary delivery block having a
16 delivery action and a secondary delivery block having a delivery action; and
17 the communications layer is further configured to transmit the alert
18 according to the delivery action of the primary delivery block and, if delivery of
19 the alert according to the primary delivery block fails, to transmit the alert
20 according to the delivery action of the secondary delivery block.

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2 33. The computer system as recited in claim 31, wherein:
3 the delivery action of the primary delivery block is a first delivery action;
4 the primary delivery block further comprises a second delivery action;
5 the first delivery action and the second delivery action further comprise a
6 time to wait for an acknowledgement that the alert was received; and
7 the communications layer is further configured to transmit the alert
8 according to the delivery action of the secondary delivery block if an
9 acknowledgement to the transmission of the alert according to the first delivery
10 action or the second delivery action of the primary delivery block is not received
11 with the time to wait identified by the first delivery action and the second delivery
12 action, respectively.

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14 34. The computer system as recited in claim 28, wherein:
15 the subscription layer further comprises a categories module that includes
16 one or more categories into which an alert may be categorized, each category
17 having a delivery mode associated therewith; and
18 the subscription layer further comprises a mapping module configured to
19 categorize an alert received from an alert source, thereby associating the delivery
20 mode of the category with the alert.
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1 35. One or more computer-readable media containing computer-
2 executable instructions that, when executed on a computer, perform the following:
3 receiving an alert from one of a plurality of alert sources;
4 determining a delivery mode which specifies a delivery method by which
5 the alert should be forwarded to a user;
6 transmitting the alert to the user according to the delivery mode.

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8 36. The one or more computer-readable media as recited in claim 35,
9 wherein the determining a primary delivery mode further comprises:
10 determining the alert source from which the alert originated;
11 identifying a category associated with the alert source; and
12 identifying a delivery mode associated with the category.

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14 37. The one or more computer-readable media as recited in claim 35,
15 wherein the transmitting the alert further comprises:
16 identifying a delivery action associated with the delivery mode; and
17 transmitting the alert according to the delivery action.

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19 38. The one or more computer-readable media as recited in claim 35,
20 wherein the transmitting the alert further comprises:
21 identifying a first delivery action associated with the delivery mode;
22 identifying a second delivery action associated with the delivery mode; and
23 transmitting the alert according to the first delivery action and the second
24 delivery action.
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1 39. The one or more computer-readable media as recited in claim 35,
2 wherein:

3 the delivery mode further comprises a primary delivery block that specifies
4 one or more delivery actions, and a secondary delivery block that specifies one or
5 more delivery actions; and

6 the transmitting the alert to the user according to the delivery mode further
7 comprises transmitting the alert to the user according to the delivery action of the
8 primary delivery block and, if the transmission fails, transmitting the alert to the
9 user according to the delivery action of the secondary delivery block.

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11 40. The one or more computer-readable media as recited in claim 39,
12 wherein:

13 the primary delivery mode includes more than one delivery action; and

14 the transmission of the alert according to the primary delivery block is
15 deemed to fail if the transmission of the alert according to the first or second
16 delivery actions fails.

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18 41. The one or more computer-readable media as recited in claim 39,
19 wherein:

20 the primary delivery mode includes more than one delivery action; and

21 the transmission of the alert according to the primary delivery block is
22 deemed to fail if the transmission of the alert according to both the first and
23 second delivery actions fails.

42. The one or more computer-readable media as recited in claim 35,
further comprising monitoring for an acknowledgement that the alert was
successfully received by the user.